



Incidence of electrolyte imbalance in children with acute gastroenteritis

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Abstract:

Background: Acute gastroenteritis (AGE) is the most common pediatric illness, which results in significant morbidity in children and it's associated with electrolyte disturbance that some of them can be dangerous.

Materials and methods: A prospective cross-sectional study of 473 children with gastroenteritis that admitted in children medical hospital emergency ward. They were treated for gastroenteritis such as oral rehydration therapy, anti-emetics and probiotics and fluid intravenous treatment. Electrolytes and urea, creatinine of all patients were checked and recorded in the data form.

RESULTS: A total of 437 children interred in this study. Of these, 243 (51%) were males and 231 (49%) were females. 4.4% of patients had mild dehydration and 78.7% of these had moderate dehydration and 20.8% of child had severe dehydration. Range of serum Na was 116-156 mmol/l and mean 136.61 ± 8.85 . Level of serum potassium was 3-6 mmol/l with mean 4.2 ± 0.64 . According to this study prevalence of sodium disturbance was 41.6 percent in the studied group. (4% severe hyponatremia with serum $\text{Na} < 120$ meq/L and 23.6% with serum Na 120 meq/L to 135 meq/L and 14% hypernatremia with serum $\text{Na} > 145$ meq/L). There was 17.2% potassium disturbance in our studied group, 13% hypokalemia (serum $\text{K} < 3.5$ mmol/L) 3.7% hyperkalemia (serum $\text{K} > 5.5$). In conclusion, electrolyte disturbances are very common in children with acute diarrhea disease. The degree of dehydration and age less than 12 months appear to be good predictors of the occurrence of, electrolyte disturbances. Early diagnosis and management prevent of complication.

Biography:

Mastaneh Moghtaderi is a Associated Professor of Pediatric nephrology, Department of pediatric nephrology, chronic kidney disease Research Center, Children Medical Center, Tehran University of Medical Science, Tehran, Iran.



Recent Publications:

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2. Evaluation of children with undescended testes whom were referred to children medical center in 5 years, Bahar Ashjaei, Mastaneh Moghtaderi, Journal , VOL,NO: J Ped. Nephrology 2017;5(3) , <http://journals.sbmu.ac.ir/jpn>
3. A Rare Case of Ganglioneuroblastoma with Presentation of Diarrhea and Resistant Hypokalemia, Maryam Boroomand, Hossein Alimadadi, Mastaneh Moghtaderi, Chinese Journal of Medical Research, Chinese J Med Res 2019; 2(1): 06-08
4. A rare case of neurologic bladder presenting with infected urachal cyst, Zahra Noparast, Mastaneh Moghtaderi, Seyed Mohammad Ghohestani, Hong Kong Journal of Paediatrics Research, 2019; 2(1): 11-13
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